

DETAIL OF WELL CONSTRUCTION

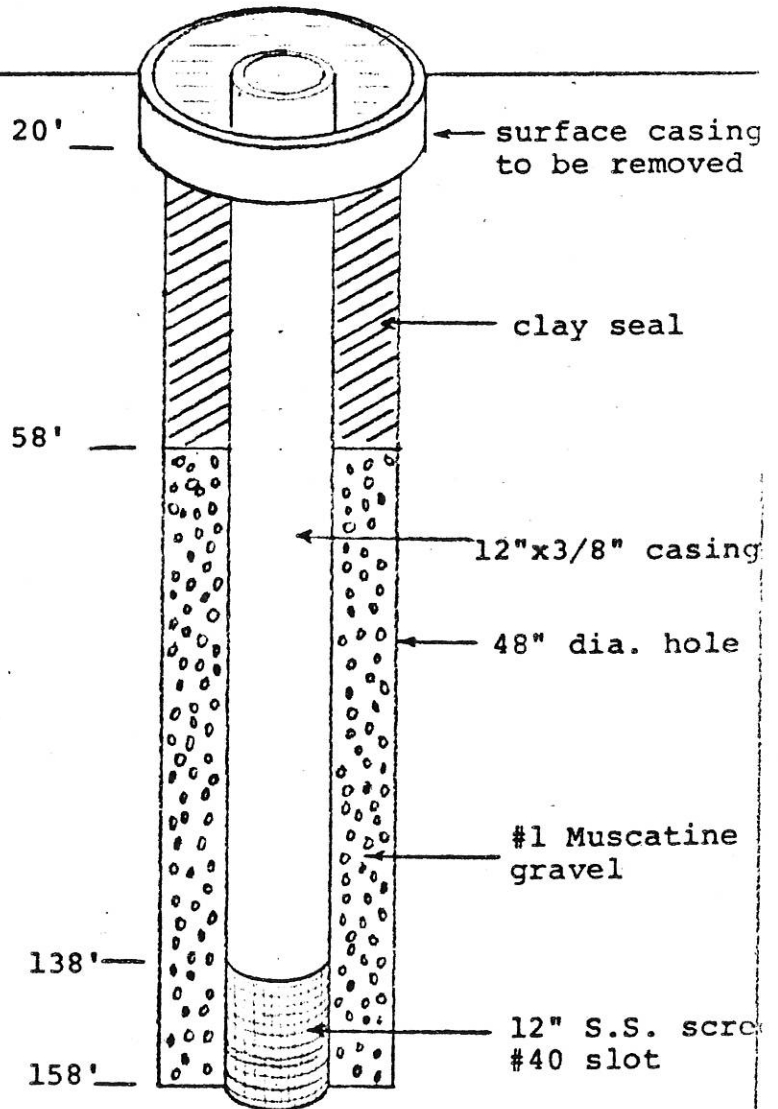
WELL NO. 6

CITY OF JEFFERSON, IOWA

GEOLOGICAL LOG

CONSTRUCTION DETAIL

BLACK SANDY FILL	5'
BROWN & GRAY TILL	36'
GRAY SHALE	58'
TILL & CLAYEY SAND	77'
GRAY TILL	108'
FINE MEDIUM BROWN SAND	114'
FINE-COARSE GRAY SAND WITH CLAY LENSES	130'
FINE-MEDIUM GRAY SAND	158'



Laysan - Western Company, Inc
 705 South Duff Avenue
 AMES, IOWA 50010

THORPE WELL COMPANY

2340 SIXTH AVENUE
DES MOINES, IOWA

B-1-0

1979

Drilled for City of Jefferson at Jefferson, Iowa

Well is located _____ miles N-E-S-W and _____ miles N-E-S-W from _____

in the _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ Section _____ Township _____ Range _____

Drilling started _____ 19 _____ Completed _____ 19 _____

Well No. 6 Kind of Well Gravel Pack Depth 154' *New depth 157** Size hole started 30 in

Finish 30 G. P. M. _____ Static Head _____ Pumping level from surface _____

Water was first encountered at 115' in Gravel Approx. Amt. _____ Temp. _____

Remarks _____

(GIVE DETAILS OF PERFORATED PIPE AND SEALS)

RECORD OF PERMANENT PIPE					TEMPORARY PIPE	
SIZE PIPE	AMOUNT OF PIPE	DEPTH TO BOTTOM OF PIPE	DEPTH TO TOP OF PIPE	MAKE OF PIPE	SIZE PIPE	AMOUNT
12"	141' 142'	142' * 139'	+ 2 + 5 *	Blk. .375 wall		
	<i>add 3' above ground</i>					
12"	15'	157' * 154'	142' * 139'	Johnson Stainless steel .060 slot		

* MEASURED FROM TOP OF PUMP BASE
Driller Douglas McIntosh From Surface to 160 feet

Driller _____ From _____ feet to _____ feet

Driller _____ From _____ feet to _____ feet

AMOUNT IN FEET	KIND OF SOIL OR FORMATION (BE SPECIFIC)	TOTAL DEPTH FEET
2'	Sandy fill	2
4'	Blk. top soil	6
12'	Yellow till	18
27'	Gray till	45
21'	Gray shale	66
5'	Gray sandy till	71
17	Coarse to med. gravel w/t clay lenses	88
24	Gray till	112
7	Med. to coarse sand	119
16	Fine coarse gravel	135
6	Fine to med. sand	141
13	Fine sand	154
6	Gray clay	160

IMPELLER NO. 8H71 .TYPE ENCLOSED .DIAMETER : A 6.313 " , B 5.662 " , C _____ " , D _____ " , _____ "

EFFICIENCY CORRECTION: ONE STAGE DEDUCT 4 % , TWO STAGE DEDUCT 2 % , THREE STAGE DEDUCT 1 % , FOUR STAGE DEDUCT 0 %

EFFECTIVE EYE AREA 11.86 sq. inches. NUMBER OF VANES 6 . THRUST CONSTANT K 4.0 lbs./ft. of head. WEIGHT 3 lbs.

FR2 .086 lbs. ft.². EYE FLUID VELOCITY CK .027 ft./sec./GPM. PERIPHERAL VELOCITY 7.68 ft./sec./inch of impeller dia.

BOWL DATA

BOWL NO. 8KH3 . CONNECTION TYPE BOLTED . NOMINAL DIAMETER (E) 7-3/4 " . MINIMUM DIAMETER (E) 7-21/32 " .

COLUMN PIPE SIZE 6 "STANDARD, 6 "MAXIMUM, 6 "MINIMUM. SUCTION PIPE SIZE 6 "STANDARD, 6 "MAXIMUM.

PUMP SHAFT DIAMETER 1 "STANDARD, 1 1/2 "MAXIMUM. LATERAL 7/16 "STANDARD, 7/16 "MAXIMUM.

SHAFT BEARING CLEARANCE .010 . IMPELLER SKIRT CLEARANCE .015 . MAXIMUM NUMBER OF STAGES 16 (std. construction).

MAXIMUM HEAD 800 ft. (std. construction). MAXIMUM SPHERE SIZE 1/2 " .

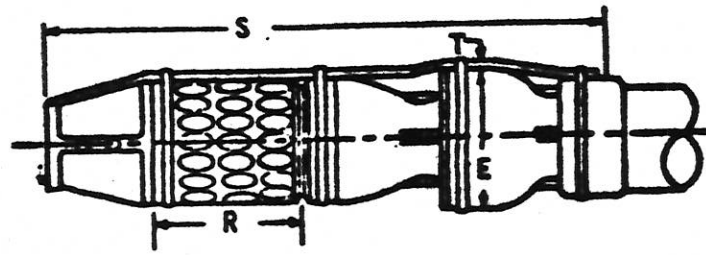
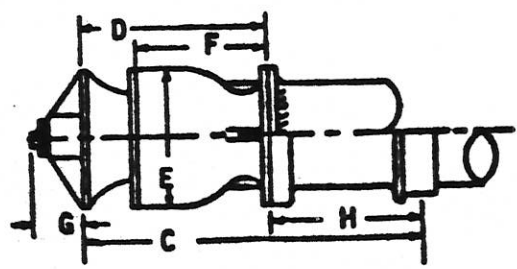
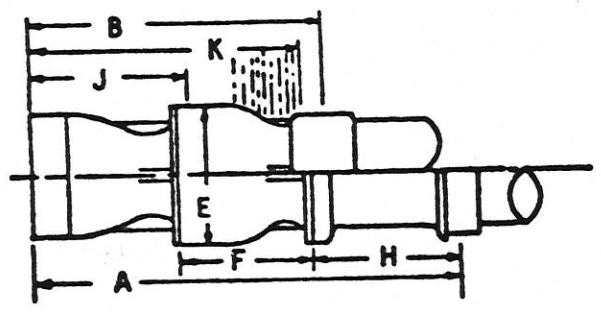
PROJECTIONS ABOVE COLUMN PIPE BUTT: TUBE 6"; SHAFT 14" - FOR EITHER OPEN OR ENCLOSED LINESHAFT.

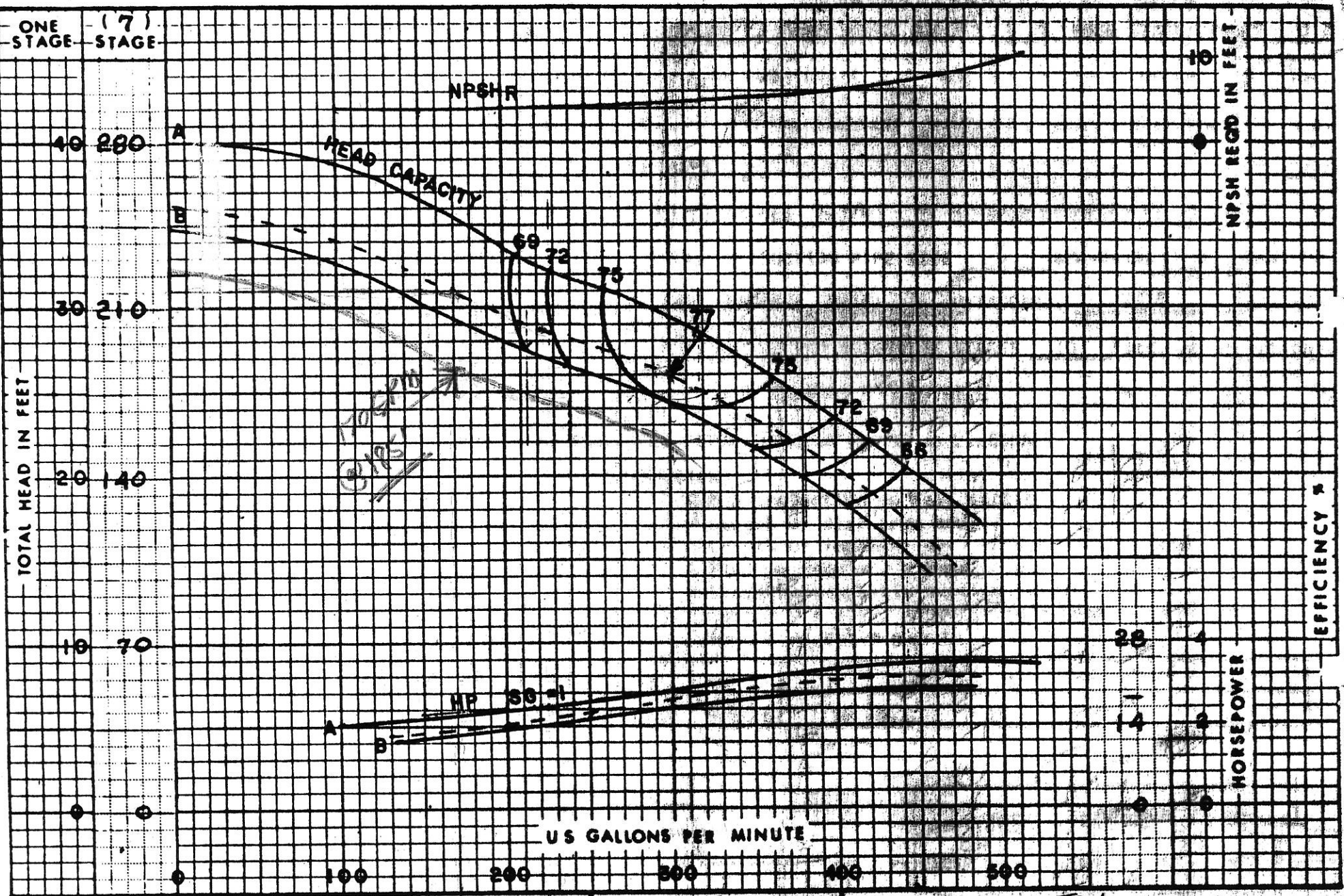
DIMENSIONS

- A-Length one stage assembly with discharge bowl.
- B-Length one stage assembly less discharge bowl.
- C-Length one stage assembly with discharge bowl and bell.
- D-Length one stage assembly less discharge bowl with bell.
- E-Bowl Diameter.
- F-Length of additional stage.

- G-Hub projection on bell suction.
- H-Length of discharge bowl.
- J-Length of impeller eye above bottom of bowl.
- K-Minimum required submergence.
- R-Length submersible suction inlet.
- S-Length one stage submersible assembly.
- T-Height of cable guard.

DIMENSION	A	B	C	D	E	F	G	H	J	K	R	S	T
INCHES	21-7/8	14-13/16	16	8-9/16	7-3/4	5-5/8	5-9/16	7-7/16	8-3/16	24	7-3/4	31-3/16	5/8





8"

8 HHE
ENAMELED

1760 RPM

PUMPING LEVEL 137' TDH = (over)
BELOW THORPE WELL
ERND. GLEDEFFERSON IOWA J.B.